

The Statement of Use of System Charges Effective from 1 April 2022

Based Upon:

The Statement of the Connection Charging Methodology
and
The Statement of the Use of System Charging Methodology

contained within

Section 14 Parts I and II respectively
of the Connection and Use of System Code

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Introduction

This charging statement is published annually in accordance with the National Grid Electricity System Operator Licence.

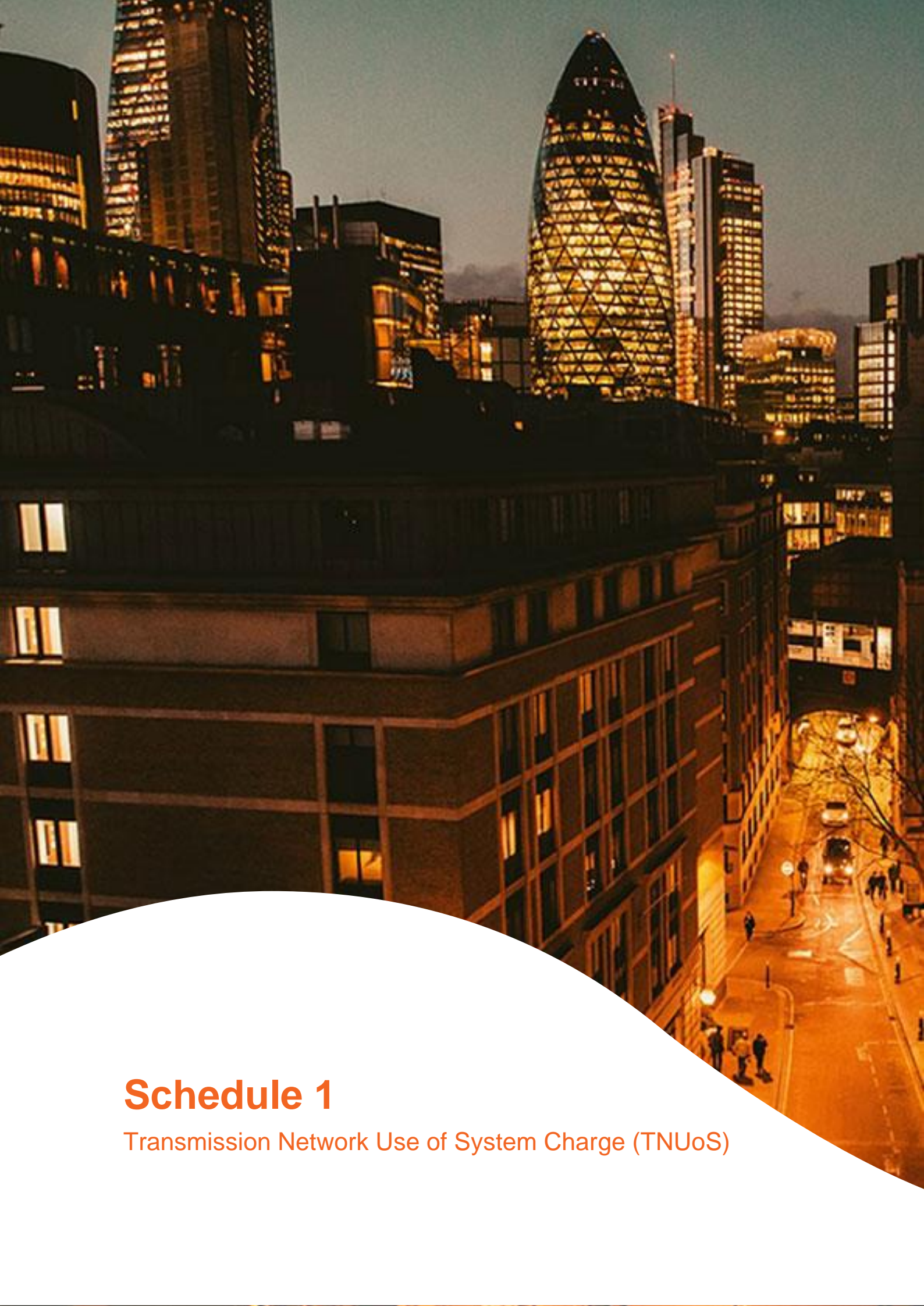
This document sets out the annual Transmission Network Use of System (TNUoS) tariffs and charges for 2022/23 and the parameters used to calculate these. This document also includes the Application Fees charged by NGESO in relation to applications for connection, use of system and engineering works.

You can find further information on the methodology we use and principles which we derive the TNUoS and Connection charges in Section 14 of the Connection and Use of System Code (CUSC) – the **Statement of the Use of System Charging Methodology**. The CUSC is available on our website at:

<https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc>

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Schedule 1

Transmission Network Use of System Charge (TNUoS)

1. Basis of 2022/23 Transmission Network Use of System Charges

The Transmission Network Use of System Charges for 2022/23 published in this document have been calculated using the methodology described in the Statement of Use of System Charging Methodology. The Onshore generation and demand tariff calculations utilises a Direct Current Load Flow (DCLF) Investment Cost Related Pricing (ICRP) transport and tariff model. Offshore Local Tariffs are calculated at the time of asset transfer and are increased by indexation each year. Offshore Local Tariffs, Onshore Local Substation Tariffs and a number of the parameters used in tariff setting are also recalculated at the start of each price control.

No changes have been approved or implemented in the charging methodology since the publication of 2021/22 tariffs that affect 2022/23 tariffs. Ofgem approved CMP343 (and related modifications) on 10 March 2022, which changes the way the Transmission Demand Residual is collected, but this change is to be implemented from 1 April 2023.

Please note that leave has been granted for a judicial review (JR) of the Competition and Markets Authority (CMA) decision, on the appeal to the CMA of the Ofgem's 2020 CMP317/327 decision, and the proceedings are yet to be concluded. As the CMP317/327 decision is being legally challenged, there is a potential risk that the 2022/23 tariffs may need to be re-calculated under a revised methodology, as a result of the JR outcome and/or any relevant Ofgem decisions. Once the JR outcome is known, we will confirm if changes to the 2022/23 tariffs are required as soon as possible.

If you would like further details on how the TNUoS tariffs have been calculated, changes that have been implemented and the parameters used to set tariffs, you can find it in our 2022/23 Final TNUoS report here:

<https://www.nationalgrideso.com/document/235056/download>

Further information on our current and historical TNUoS Tariffs can be found here:

<https://www.nationalgrideso.com/industry-information/charging/transmission-network-use-system-tnuos-charges>

The following tables provide a summary of some of the parameters utilised to calculate tariffs

Table 1.1: TNUoS Calculation Parameters

Parameter	Value/Basis
Transport model network, nodal generation & nodal demand data	Based upon various data sources as defined in Section 14 of the Connection and Use of System Code (CUSC)
Expansion constant	£15.462801/MWkm
Annuity factor	4.2%
Overhead factor	1.5%
Locational onshore security factor	1.76
Offshore civil engineering discount	£ 0.612615/kW

Table 1.2: Onshore Wider Cable and Overhead Line (OHL) Expansion Factors

TO Region	Cable Expansion Factor			OHL Expansion Factor		
	400kV	275kV	132kV	400kV	275kV	132kV
Scottish Hydro Electric Transmission plc	10.20	11.45	20.77	1.00	1.20	2.59
SP Transmission plc	10.20	11.45	22.58	1.00	1.20	2.87
National Grid Electricity Transmission plc	10.20	11.45	22.58	1.00	1.20	2.87

Table 1.3 Onshore Local Expansion Factors (All TO Regions)

2dp	400kV	275kV	132kV			
			Single Circuit <200MVA	Double Circuit <200MVA	Single Circuit >=200MVA	Double Circuit >=200MVA
Cable Expansion Factor	10.20	11.45	22.58	22.58	22.58	22.58
OHL Expansion Factor	1.00	1.20	10.33	8.38	5.91	3.95

Table 1.4 Offshore Local Expansion Factors

Offshore Power Station	Local Expansion Factor (to 2 d.p.)
Barrow	80.24
Beatrice	7.30
Burbo Bank	25.67
Dudgeon	19.90
Galloper	18.60
Greater Gabbard	47.54, 45.36
Gunfleet	91.08
Gwynt Y Mor	43.84
Hornsea 1A	19.86
Hornsea 1B	19.00
Hornsea 1C	17.38
Humber Gateway	41.90
Lincs	71.41
London Array	50.01
Ormonde	77.19
Race Bank	10.61
Rampion	31.77
Robin Rigg	316.31
Robin Rigg West	316.31
Sheringham Shoal	45.88
Thanet	76.30
Walney 1	66.88
Walney 2	60.03
Walney 3	16.73
Walney 4	20.09
West of Duddon Sands	62.98
Westermost Rough	82.38

Please note Greater Gabbard has a Local Expansion Factor for each offshore platform due to varying circuit ratings.

Further Offshore Local Expansion Factors applicable to generation connecting to offshore transmission infrastructure during 2022/23 will be published in future revisions of this statement following the completion of asset transfer.

These scaling factors and generation plant types are set out in the latest Security and Quality of Supply Standard (SQSS), and are used to calculate TNUoS tariffs.

Table 1.5 Generation scaling factors for the purpose of tariff calculation

Generation Plant Type	Peak Security Background	Year-Round Background
Intermittent	Fixed (0%)	Fixed (70%)
Nuclear & CCS	Variable	Fixed (85%)
Interconnectors	Fixed (0%)	Fixed (100%)
Hydro	Variable	Variable
Electricity Storage (including Pumped Storage)	Variable	Fixed (50%)
Peaking	Variable	Fixed (0%)
Other (Conventional)	Variable	Variable

These categories are used to calculate the Not Shared Year-Round and Shared Year-Round tariffs. The categorisation is based on generators' impact on the transmission network, and do not reflect carbon intensity or energy policies. "Carbon" means "flexible generators" and "Low Carbon" means "inflexible generators".

Table 1.6 Categorisation of Low Carbon and Carbon generation

Carbon	Low Carbon
Coal	Wind
Gas	Hydro (excl. Pumped Storage)
Biomass	Nuclear
Oil	Marine
Electricity Storage (including Pumped Storage)	Solar
Interconnectors	Tidal

The categorisation will be updated from time to time, to include new technologies.

2. Schedule of Transmission Network Use of System Wider Zonal Generation Charges (£/kW) in 2022/23

This section summarises the generation tariffs. The tariffs include the implementation of CUSC modification proposals CMP317/327, which were raised following Ofgem’s decision on the Targeted Charging Review (TCR) and in particular the Transmission Generation Residual (TGR).

Following the implementation of CMP317/327, the TGR has been set to £0/kW but an adjustment has been introduced to ensure generation charges are still compliant with the cap.

As per Ofgem’s decision on TGR, all Local Charges for Local Circuits and Local Substations paid by generators have been excluded for the purposes of assessing compliance with the €0-2.50/MWh range.

As the CMP317/327 decision is being legally challenged under a judicial review (JR), there is a potential risk that the 2022/23 tariffs may need to be re-calculated under a revised methodology, as a result of the JR outcome and/or any relevant Ofgem decisions.

The following table provides the Wider Zonal Generation TNUoS tariffs applicable from 1 April 2022.

Table 1.7 Wider Zonal Generation TNUoS Tariffs

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff	Adjustment Tariff	Conventional Carbon	Conventional Low Carbon	Intermittent
						Load Factor 40%	Load Factor 75%	Load Factor 45%
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)	(£/kW)
1	North Scotland	4.037870	18.772316	17.540622	-0.228726	18.334319	35.429003	25.759438
2	East Aberdeenshire	3.412809	9.105333	17.540622	-0.228726	13.842465	27.553705	21.409296
3	Western Highlands	3.762459	16.715407	16.666088	-0.228726	16.886331	32.736376	23.959295
4	Skye and Lochalsh	-0.801547	16.715407	18.241941	-0.228726	12.952666	29.748223	25.535148
5	Eastern Grampian and Tayside	4.718927	12.133958	13.860260	-0.228726	14.887888	27.450930	19.091815
6	Central Grampian	4.075139	12.559466	14.354827	-0.228726	14.612130	27.620840	19.777861
7	Argyll	2.457357	10.648546	19.907501	-0.228726	14.451050	30.122542	24.470621
8	The Trossachs	3.390150	10.648546	12.092775	-0.228726	12.257952	23.240609	16.655895
9	Stirlingshire and Fife	2.840483	10.103492	11.622964	-0.228726	11.302339	21.812340	15.940809
10	South West Scotlands	2.384017	9.923382	11.482148	-0.228726	10.717503	21.079976	15.718944
11	Lothian and Borders	4.651799	9.923382	6.884609	-0.228726	11.146269	18.750219	11.121405
12	Solway and Cheviot	2.413107	6.709728	6.503989	-0.228726	7.469868	13.720666	9.294641
13	North East England	4.707139	5.364557	4.300728	-0.228726	8.344527	12.802559	6.486053
14	North Lancashire and The Lakes	1.894399	5.364557	1.377186	-0.228726	4.362370	7.066277	3.562511
15	South Lancashire, Yorkshire and Humber	5.246656	1.791232	0.223035	-0.228726	5.823637	6.584389	0.800363
16	North Midlands and North Wales	3.949239	0.751514	0.000000	-0.228726	4.021119	4.284149	0.109455
17	South Lincolnshire and North Norfolk	4.010018	-0.419162	0.000000	-0.228726	3.613627	3.466921	-0.417349
18	Mid Wales and The Midlands	1.574188	1.275666	0.000000	-0.228726	1.855728	2.302212	0.345324
19	Anglesey and Snowdon	4.836354	1.308885	0.000000	-0.228726	5.131182	5.589292	0.360272
20	Pembrokeshire	7.438941	-4.614656	0.000000	-0.228726	5.364353	3.749223	-2.305321
21	South Wales & Gloucester	3.285553	-5.364926	0.000000	-0.228726	0.910857	-0.966867	-2.642943
22	Cotswold	1.971701	3.080800	-6.994646	-0.228726	0.177437	-2.941071	-5.837012
23	Central London	-2.666852	3.080800	-9.826937	-0.228726	-5.594033	-10.411915	-8.669303
24	Essex and Kent	-2.943894	3.080800	0.000000	-0.228726	-1.940300	-0.862020	1.157634
25	Oxfordshire, Surrey and Sussex	-1.735486	-0.858400	0.000000	-0.228726	-2.307572	-2.608012	-0.615006
26	Somerset and Wessex	-3.443002	-2.134847	0.000000	-0.228726	-4.525667	-5.272863	-1.189407
27	West Devon and Cornwall	-2.104777	-4.734711	0.000000	-0.228726	-4.227387	-5.884536	-2.359346

The System Peak, Shared Year-Round and Not Shared Year-Round tariffs are locational elements that reflect the cost of providing incremental capacity to generation on an area of the main integrated onshore transmission system. The non-locational adjustment ensures that the appropriate amount of transmission revenue is recovered from generators within the generation cap of €0-2.50/MWh.

For conventional low-carbon generation technologies, the wider zonal generation tariff is the sum of the Peak Tariff, the Shared Year-Round Tariff scaled by the generator's Annual Load Factor, the Not Shared Year-Round Tariff and the Adjustment Tariff.

For conventional carbon generation technology, the wider zonal generation tariff is the sum of the Peak Tariff and the Adjustment Tariff, and the Shared Year-Round Tariff and Not Shared Year-Round Tariff scaled by the generator's Annual Load Factor (ALF).

For intermittent generation technologies, the wider zonal generation tariff is the sum of the Shared Year-Round Tariff scaled by the generator's Annual Load Factor, the Not Shared Year-Round Tariff and the Adjustment Tariff.

The 80% and 40% ALFs used in this table for the Conventional Carbon, Conventional Low Carbon and Intermittent example tariffs are for illustration only. Tariffs for individual generators are calculated using their own ALF.

Wider generation charges are charged based on which zone the transmission substation is in that the generator connects to. The tariffs are also calculated for each specific generator based on their ALF.

3. Schedule of Annual Load Factors for 2022/23

The below tables show the final Annual Load Factors (ALFs) to be used in the calculation of generator TNUoS tariffs for 2022/23, effective from 1 April 2022. The ALFs are based on generation data for the last five years from 2016/17 until 2020/21. Where historic data is not available for a new or mothballed station, we use a generic ALF corresponding to the station's generation technology type.

Table 1.8 Annual Load Factors

Power Station	Technology	Specific ALF
ABERDEEN	Offshore_Wind	0.429074
ABERTHAW	Coal	0.040372
ACHRUACH	Onshore_Wind	0.418315
AFTON	Onshore_Wind	0.457149
AIKENGALL II	Onshore_Wind	0.246749
AN SUIDHE	Onshore_Wind	0.369803
ARECLEOCH	Onshore_Wind	0.314297
BAD A CHEO	Onshore_Wind	0.353134
BAGLAN BAY	CCGT_CHP	0.182830
BARROW	Offshore_Wind	0.414379
BEATRICE	Offshore_Wind	0.539168
BEAULY CASCADE	Hydro	0.328708
BEINNEUN	Onshore_Wind	0.385787
BHLARAIDH	Onshore_Wind	0.417879
BLACK LAW	Onshore_Wind	0.236084
BLACKCRAIG WINDFARM	Onshore_Wind	0.465147
BLACKLAW EXTENSION	Onshore_Wind	0.317893
BRIMSDOWN	CCGT_CHP	0.356180
BURBO BANK EXT	Offshore_Wind	0.458737
CARRAIG GHEAL	Onshore_Wind	0.457276
CARRINGTON	CCGT_CHP	0.541630
CLUNIE	Hydro	0.368081
CLYDE (NORTH)	Onshore_Wind	0.395031
CLYDE (SOUTH)	Onshore_Wind	0.366358
CONNAHS QUAY	CCGT_CHP	0.196681
CONON CASCADE	Hydro	0.519796
CORBY	CCGT_CHP	0.008514
CORRIEGARTH	Onshore_Wind	0.471660
CORRIEMOILLIE	Onshore_Wind	0.333668
CORYTON	CCGT_CHP	0.312470
COTTAM	Coal	0.109669
COTTAM DEVELOPMENT CENTRE	CCGT_CHP	0.610513
COUR	Onshore_Wind	0.563965
COWES	Gas_Oil	0.002314
COWLEY	Pumped_Storage	0.085788
CROSSDYKES	Onshore_Wind	0.330420
CRUACHAN	Pumped_Storage	0.078284
CRYSTAL RIG II	Onshore_Wind	0.490060
CRYSTAL RIG III	Onshore_Wind	0.529069
DAMHEAD CREEK	CCGT_CHP	0.462650

Power Station	Technology	Specific ALF
DEESIDE	CCGT_CHP	0.069388
DERSALLOCH	Onshore_Wind	0.373895
DIDCOT B	CCGT_CHP	0.481671
DIDCOT GTS	Gas_Oil	0.004068
DINORWIG	Pumped_Storage	0.119152
DORENELL	Onshore_Wind	0.483487
DRAX	Coal	0.514117
DUDGEON	Offshore_Wind	0.506025
DUNGENESS B	Nuclear	0.360344
DUNLAW EXTENSION	Onshore_Wind	0.282952
DUNMAGLASS	Onshore_Wind	0.592137
EAST ANGLIA 1	Offshore_Wind	0.425085
EDINBANE WIND	Onshore_Wind	0.332561
ERROCHTY	Hydro	0.178398
EWE HILL	Onshore_Wind	0.342428
FALLAGO	Onshore_Wind	0.494378
FARR WINDFARM	Onshore_Wind	0.386723
FASNAKYLE G1 & G3	Hydro	0.436524
FAWLEY CHP	CCGT_CHP	0.680053
FFESTINIOG	Pumped_Storage	0.035938
FIDDLERS FERRY	Coal	0.093380
FINLARIG	Hydro	0.594262
FOYERS	Pumped_Storage	0.127909
FREASDAIL	Onshore_Wind	0.405011
GALAWHISTLE	Onshore_Wind	0.488571
GALLOPER	Offshore_Wind	0.532649
GARRY CASCADE	Hydro	0.593659
GLANDFORD BRIGG	CCGT_CHP	0.011697
GLEN APP	Onshore_Wind	0.255450
GLENDOE	Hydro	0.298324
GLENMORISTON	Hydro	0.416558
GORDONBUSH	Onshore_Wind	0.380664
GRAIN	CCGT_CHP	0.488114
GRANGEMOUTH	CCGT_CHP	0.587659
GREAT YARMOUTH	CCGT_CHP	0.471331
GREATER GABBARD	Offshore_Wind	0.447545
GRIFFIN WIND	Onshore_Wind	0.269246
GUNFLEET SANDS I	Offshore_Wind	0.444467
GUNFLEET SANDS II	Offshore_Wind	0.436237
GWYNT Y MOR	Offshore_Wind	0.443273
HADYARD HILL	Onshore_Wind	0.320804
HALSARY WIND FARM	Onshore_Wind	0.348256
HARESTANES	Onshore_Wind	0.269284
HARTLEPOOL	Nuclear	0.805555
HEYSHAM	Nuclear	0.796386
HINKLEY POINT B	Nuclear	0.744689
HORNSEA 1A	Offshore_Wind	0.446724
HORNSEA 1B	Offshore_Wind	0.493987
HORNSEA 1C	Offshore_Wind	0.481634
HUMBER GATEWAY	Offshore_Wind	0.509222
HUNTERSTON	Nuclear	0.512058
IMMINGHAM	CCGT_CHP	0.703303
INDIAN QUEENS	Gas_Oil	0.000672
J G PEARS	Biomass	0.416752
KEADBY	CCGT_CHP	0.322241
KEITH HILL	Onshore_Wind	0.236356
KEMSLEY	CCGT_CHP	0.479369
KILBRAUR	Onshore_Wind	0.468407
KILGALLIOCH	Onshore_Wind	0.444177
KILLIN CASCADE	Hydro	0.391538
KILLINGHOLME (POWERGEN)	Gas_Oil	0.011789
KINGS LYNN A	CCGT_CHP	0.243845

Power Station	Technology	Specific ALF
KYPE MUIR	Onshore_Wind	0.353830
LANGAGE	CCGT_CHP	0.322526
LINCS WIND FARM	Offshore_Wind	0.486483
LITTLE BARFORD	CCGT_CHP	0.555242
LOCHLUICHART	Onshore_Wind	0.328942
LONDON ARRAY	Offshore_Wind	0.477759
LYNEMOUTH	Biomass	0.878301
MARCHWOOD	CCGT_CHP	0.677633
MARK HILL	Onshore_Wind	0.291978
MEDWAY	CCGT_CHP	0.326969
MIDDLE MUIR	Onshore_Wind	0.389386
MILLENNIUM	Onshore_Wind	0.510024
MINNYGAP	Onshore_Wind	0.329267
NANT	Hydro	0.334266
NURSLING TERTIARY	Pumped_Storage	0.090239
ORMONDE	Offshore_Wind	0.405610
PEMBROKE	CCGT_CHP	0.680711
PEN Y CYMOEDD	Onshore_Wind	0.370990
PETERBOROUGH	CCGT_CHP	0.005902
PETERHEAD	CCGT_CHP	0.524949
POGBIE	Onshore_Wind	0.299235
RACE BANK	Offshore_Wind	0.490819
RAMPION	Offshore_Wind	0.392675
RATCLIFFE-ON-SOAR	Coal	0.136662
ROBIN RIGG EAST	Offshore_Wind	0.409224
ROBIN RIGG WEST	Offshore_Wind	0.435964
ROCKSAVAGE	CCGT_CHP	0.334005
RYE HOUSE	CCGT_CHP	0.100951
SALTEND	CCGT_CHP	0.731783
SANQUHAR	Onshore_Wind	0.538253
SEABANK	CCGT_CHP	0.338486
SELLAFIELD	CCGT_CHP	0.085565
SEVERN POWER	CCGT_CHP	0.405006
SHERINGHAM SHOAL	Offshore_Wind	0.489182
SHOREHAM	CCGT_CHP	0.341743
SIZEWELL B	Nuclear	0.804390
SLOY G2 & G3	Hydro	0.120685
SOUTH HUMBER BANK	CCGT_CHP	0.485012
SPALDING	CCGT_CHP	0.519579
SPALDING ENERGY EXPANSION	CCGT_CHP	0.228076
STAYTHORPE	CCGT_CHP	0.561780
STRATHY NORTH & SOUTH	Onshore_Wind	0.363343
STRONELAIRG	Onshore_Wind	0.430577
SUTTON BRIDGE	CCGT_CHP	0.260096
TAYLORS LANE	Gas_Oil	0.004293
TEES RENEWABLE	Biomass	0.287789
THANET	Offshore_Wind	0.377919
TODDLBURN	Onshore_Wind	0.355609
TORNESS	Nuclear	0.894864
TRALORG	Onshore_Wind	0.325054
TRITON KNOLL OFFSHORE WIND FARM	Offshore_Wind	0.350060
USKMOUTH	Coal	0.000412
WALNEY 4	Offshore_Wind	0.522874
WALNEY I	Offshore_Wind	0.460969
WALNEY II	Offshore_Wind	0.531501
WALNEY III	Offshore_Wind	0.533709
WEST BURTON	Coal	0.089256
WEST BURTON B	CCGT_CHP	0.568603
WEST OF DUDDON SANDS	Offshore_Wind	0.501171
WESTERMOST ROUGH	Offshore_Wind	0.558072
WHITELEE	Onshore_Wind	0.295296
WHITELEE EXTENSION	Onshore_Wind	0.263097

Power Station	Technology	Specific ALF
WHITESIDE HILL	Onshore_Wind	0.572428
WILTON	CCGT_CHP	0.180597
WINDY STANDARD II	Onshore_Wind	0.518141

Table 1.9 Generic Annual Load Factors

Technology	Generic ALF
Gas_Oil #	0.4627%
Pumped_Storage	9.0321%
Tidal *	12.8000%
Biomass	43.1684%
Wave *	2.9000%
Onshore Wind	35.5062%
CCGT_CHP	51.3589%
Hydro	40.9203%
Offshore Wind	48.2161%
Coal	14.0552%
Nuclear	70.2612%
Solar *	10.9000%

These Generic ALFs are calculated in accordance with CUSC 14.15.110.

Includes OCGTs (Open Cycle Gas Turbine generating plant).

*Note: due to no metered data being available the Generic ALF values for Wave, Tidal and Solar technologies are taken from the BEIS publication: [‘Calculating the level of the Renewables Obligation for 2022/23’](#).

4. Schedule of Transmission Network Use of System Local Substation Generation Charges (£/kW) in 2022/23

The following table provides the Local Substation Generation TNUoS tariffs applicable to all generation directly connected to the onshore GB Transmission Network from 1 April 2022

Table 1.10 Onshore Local Substation Tariffs (£/kW)

Substation Rating	Connection Type	132kV	275kV	400kV
<1320 MW	No redundancy	0.150770	0.075388	0.051999
<1320 MW	Redundancy	0.317689	0.161359	0.114575
>=1320 MW	No redundancy		0.221489	0.157694
>=1320 MW	Redundancy		0.333303	0.239726

The above tariffs reflect the cost of the transmission substation equipment provided to facilitate generation connecting to an onshore substation.

The following table provides the Local Substation Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2022.

Table 1.11 Offshore Local Substation Tariffs (£/kW)

Offshore Generator	Local Substation (£/kW)	Offshore Generator	Local Substation (£/kW)
Barrow	9.193620	Ormonde	28.266390
Beatrice	7.738282	Race Bank	10.258559
Burbo Bank	11.581837	Rampion	8.380255
Dudgeon	16.940266	Robin Rigg	-0.620411
Galloper	17.340653	Robin Rigg West	-0.620411
Greater Gabbard	17.129624	Sheringham Shoal	26.445404
Gunfleet	20.007271	Thanet	20.194388
Gwynt y mor	21.749280	Walney 1	24.413618
Hornsea 1A	7.741153	Walney 2	22.713291
Hornsea 1B	7.741153	Walney 3	10.537649
Hornsea 1C	7.741153	Walney 4	10.537649
Humber Gateway	12.799572	West of Duddon Sands	9.424073
Lincs	17.768864	Westermost Rough	19.162273
London Array	12.058331		

Further local substation tariffs applicable to generation connecting to offshore transmission infrastructure during 2022/23 will be published in future revisions of this statement following the completion of asset transfer.

5. Schedule of Transmission Network Use of System Local Circuit Charges (£/kW) in 2022/23

Where a transmission-connected generator is not directly connected to the Main Interconnected Transmission System (MITS) nodes, the onshore local circuit tariffs reflect the cost and flows on circuits between its connection and the MITS nodes. Local circuit tariffs can change as a result of system power flows and TNUoS parameters. Depending on the topology, onshore local circuits with circuit redundancy had tariff changes as a result of CMP357, which changed with the security factor from 1.8 to 1.76. Onshore local circuit tariffs are listed in the table below.

Table 1.12 Onshore Local Circuit Tariffs

Substation Name	Local Circuit (£/kW)	Substation Name	Local Circuit (£/kW)	Substation Name	Local Circuit (£/kW)
Aberdeen Bay	2.671000	Edinbane	7.171952	Middle Muir	2.407415
Achruach	-2.616009	Ewe Hill	1.558191	Middleton	0.154278
Aigas	0.685223	Fallago	-0.067330	Millennium South	0.494319
An Suidhe	-0.979390	Farr	3.652465	Millennium Wind	1.720497
Arecleoch	2.176008	Fernoch	4.608469	Mossford	2.951276
Beinneun Wind Farm	1.380647	Ffestiniogg	0.259176	Nant	-1.287043
Bhlaraidh Wind Farm	0.676448	Finlarig	0.335473	Necton	1.165832
Black Hill	1.590910	Foyers	0.300069	Rhigos	0.108099
Black Law	1.830721	Galawhistle	1.677173	Rocksavage	0.018502
Blackcraig Wind Farm	6.089148	Glen Kyllachy	0.479246	Saltend	0.017775
Blacklaw Extension	3.882282	Glendoe	1.927155	Sandy Knowe	5.244576
Clyde (North)	0.114898	Glenglass	4.929012	South Humber Bank	-0.190400
Clyde (South)	0.132874	Gordonbush	1.269706	Spalding	0.274973
Corriegarth	3.035227	Griffin Wind	9.937450	Strathbrora	0.860658
Corriemoillie	1.706045	Hadyard Hill	2.899919	Strathy Wind	2.029769
Coryton	0.047861	Harestanes	2.448949	Stronelaig	1.114237
Creag Riabhach	3.514474	Hartlepool	0.091422	Wester Dod	0.356506
Cruachan	1.869753	Invergarry	0.383397	Whitelee	0.111191
Culligran	1.815856	Kilgallioch	1.102649	Whitelee Extension	0.309112
Deanie	2.983193	Kilmorack	0.206913		
Dersalloch	2.523707	Kype Muir	1.554002		
Dinorwig	2.457864	Langage	0.674171		
Dorenell	2.149878	Lochay	0.383397		
Dumnaglass	1.187466	Luichart	0.589179		
Dunhill	1.467292	Marchwood	0.391622		
Dunlaw Extension	1.553756	Mark Hill	0.917330		

The following table provides the Local Circuit Generation TNUoS tariffs applicable to generation connecting to offshore transmission infrastructure from 1 April 2022.

Table 1.13 Offshore Local Circuit Tariffs

Offshore Generator	Local Circuit (£/kW)	Offshore Generator	Local Circuit (£/kW)
Barrow	48.569420	Ormonde	52.836011
Beatrice	21.105031	Race Bank	28.492731
Burbo Bank	22.384141	Rampion	21.922390
Dudgeon	26.579538	Robin Rigg	35.215839
Galloper	27.426026	Robin Rigg West	35.215839
Greater Gabbard	39.639672	Sheringham Shoal	31.146260
Gunfleet	18.450293	Thanet	37.834233
Gwynt y mor	21.503123	Walney 1	48.809029
Hornsea 1A	27.389407	Walney 2	46.223810
Hornsea 1B	27.389407	Walney 3	21.348645
Hornsea 1C	27.389407	Walney 4	21.348645
Humber Gateway	29.366622	West of Duddon Sands	46.977768
Lincs	69.878865	Westermost Rough	32.611753
London Array	41.343394		

Further local circuit tariffs applicable to generation connecting to offshore transmission infrastructure during 2022/23 will be published in future revisions of this statement following the completion of asset transfer.

6. Schedule of Transmission Network Use of System STTEC and LDTEC Charges in 2022/23

The following table provides the Short-Term Transmission Entry Capacity (STTEC) and Limited Duration Transmission Entry Capacity (LDTEC) tariffs applicable to generators from 1 April 2022.

Table 1.14 Short Term Transmission Entry Capacity (STTEC) and Limited Duration Transmission Entry Capacity (LDTEC)

Power Station	LDTEC Tariff (£/kW/Week)		STTEC Tariff (£/kW)		
	Higher Rate	Lower rate	28 days	35 days	42 days
Aberdeen Offshore Wind Farm	0.140228	0.010255	0.560912	0.701140	0.841368
Abergelli Power Limited	0.000000	0.000000	0.000000	0.000000	0.000000
Afton Wind Farm	0.100201	0.007328	0.400804	0.501005	0.601206
Aigas (part of the Beaulieu Cascade)	0.043890	0.003210	0.175560	0.219450	0.263340
Aikengall Ila Wind Farm	0.026632	0.001948	0.106528	0.133160	0.159792
Aikengall II Windfarm	0.006015	0.000440	0.024060	0.030075	0.036090
An Suidhe Wind Farm - Argyll (SRO)	0.000000	0.000000	0.000000	0.000000	0.000000
Arecleoch	0.122156	0.008933	0.488624	0.610780	0.732936
Axminster	0.006015	0.000440	0.024060	0.030075	0.036090
Bad a Cheo Wind Farm	0.007915	0.000579	0.031660	0.039575	0.047490
Barrow Offshore Wind Farm	3.095877	0.226399	12.383508	15.479385	18.575262
Beatrice Wind Farm	1.514274	0.110738	6.057096	7.571370	9.085644
Beinneun Wind Farm	0.080399	0.005880	0.321596	0.401995	0.482394
Bhlaraidh Wind Farm	0.043429	0.003176	0.173716	0.217145	0.260574
Blackcraig Wind Farm	0.327596	0.023957	1.310384	1.637980	1.965576
Blacklaw	0.104028	0.007608	0.416112	0.520140	0.624168
Blacklaw Extension	0.211735	0.015484	0.846940	1.058675	1.270410
Bredbury	0.008471	0.000620	0.033884	0.042355	0.050826
Burbo Bank Extension Offshore Wind Farm	1.783214	0.130405	7.132856	8.916070	10.699284
Burwell (Tertiary)	0.006015	0.000440	0.024060	0.030075	0.036090
Bustleholme	0.008471	0.000620	0.033884	0.042355	0.050826
Capenhurst 275KV Substation	0.003958	0.000289	0.015832	0.019790	0.023748
Carraig Gheal Wind Farm	0.249860	0.018272	0.999440	1.249300	1.499160
Carrington	0.008471	0.000620	0.033884	0.042355	0.050826
Carrington Power Station	0.006015	0.000440	0.024060	0.030075	0.036090
CDCL	0.006015	0.000440	0.024060	0.030075	0.036090
Cleve Hill Solar Park	0.000000	0.000000	0.000000	0.000000	0.000000
Clunie (part of the Clunie Cascade)	0.007915	0.000579	0.031660	0.039575	0.047490
Clyde North	0.009990	0.000731	0.039960	0.049950	0.059940
Clyde South	0.010934	0.000800	0.043736	0.054670	0.065604
Connahs Quay	0.012586	0.000920	0.050344	0.062930	0.075516
Corby	0.000000	0.000000	0.000000	0.000000	0.000000
Corriegarh	0.167265	0.012232	0.669060	0.836325	1.003590
Corriemoillie Wind Farm	0.106246	0.007770	0.424984	0.531230	0.637476
Coryton	0.008528	0.000624	0.034112	0.042640	0.051168
Cour Wind Farm	0.016679	0.001220	0.066716	0.083395	0.100074
Coventry	0.008471	0.000620	0.033884	0.042355	0.050826
Cowes	0.000000	0.000000	0.000000	0.000000	0.000000
Cowley	0.006015	0.000440	0.024060	0.030075	0.036090
Cowley (Tertiary)	0.006015	0.000440	0.024060	0.030075	0.036090
Creag Riabhach Wind Farm	0.192425	0.014072	0.769700	0.962125	1.154550
Crossdykes	0.089720	0.006561	0.358880	0.448600	0.538320

Power Station	LDTEC Tariff (£/kW/Week)		STTEC Tariff (£/kW)		
	Higher Rate	Lower rate	28 days	35 days	42 days
Cruachan	0.102120	0.007468	0.408480	0.510600	0.612720
Crystal Rig III Wind Farm	0.006015	0.000440	0.024060	0.030075	0.036090
Crystal Rig II Wind Farm	0.006015	0.000440	0.024060	0.030075	0.036090
Crystal Rig IV Wind Farm	0.000000	0.000000	0.000000	0.000000	0.000000
Culligran (part of the Beaulieu Cascade)	0.103248	0.007550	0.412992	0.516240	0.619488
Cumberhead	0.016679	0.001220	0.066716	0.083395	0.100074
Dalquhandy Wind Farm	0.016679	0.001220	0.066716	0.083395	0.100074
Damhead Creek	0.006015	0.000440	0.024060	0.030075	0.036090
Deanie (part of the Beaulieu Cascade)	0.164533	0.012032	0.658132	0.822665	0.987198
Deeside Power Station	0.012586	0.000920	0.050344	0.062930	0.075516
Dersalloch Wind Farm	0.140410	0.010268	0.561640	0.702050	0.842460
Didcot A GTs	0.000000	0.000000	0.000000	0.000000	0.000000
Didcot B	0.012586	0.000920	0.050344	0.062930	0.075516
Dinorwig	0.137317	0.010042	0.549268	0.686585	0.823902
Dorenell Windfarm	0.120784	0.008833	0.483136	0.603920	0.724704
Douglas West	0.016679	0.001220	0.066716	0.083395	0.100074
Drax (Biomass)	0.012586	0.000920	0.050344	0.062930	0.075516
Drax (Coal)	0.012586	0.000920	0.050344	0.062930	0.075516
Dudgeon Offshore Wind Farm	2.345996	0.171561	9.383984	11.729980	14.075976
Dungeness B	0.006015	0.000440	0.024060	0.030075	0.036090
Dun Law Ext Repower	0.089488	0.006544	0.357952	0.447440	0.536928
Dunmaglass Wind Farm	0.070257	0.005138	0.281028	0.351285	0.421542
East Anglia One	0.000000	0.000000	0.000000	0.000000	0.000000
Edinbane Wind - Skye	0.384443	0.028114	1.537772	1.922215	2.306658
Enfield	0.008471	0.000620	0.033884	0.042355	0.050826
Errochty	0.007915	0.000579	0.031660	0.039575	0.047490
Ewe Hill	0.089720	0.006561	0.358880	0.448600	0.538320
Fallago Rig Wind Farm	0.002480	0.000181	0.009920	0.012400	0.014880
Farr Wind Farm - Tomatin	0.199670	0.014602	0.798680	0.998350	1.198020
Fasnakyle G1 & G2	0.003958	0.000289	0.015832	0.019790	0.023748
Fawley CHP	0.000000	0.000000	0.000000	0.000000	0.000000
Feckenham	0.000000	0.000000	0.000000	0.000000	0.000000
Ffestiniog	0.017565	0.001284	0.070260	0.087825	0.105390
Finlarig	0.025528	0.001867	0.102112	0.127640	0.153168
Firth of Forth Phase 1	0.000000	0.000000	0.000000	0.000000	0.000000
Foyers	0.019711	0.001441	0.078844	0.098555	0.118266
Freasdail	0.016679	0.001220	0.066716	0.083395	0.100074
Galawhistle Wind Farm	0.016679	0.001220	0.066716	0.083395	0.100074
Galloper Wind Farm	2.350251	0.171872	9.401004	11.751255	14.101506
Glen App Windfarm	0.122156	0.008933	0.488624	0.610780	0.732936
Glendoe	0.109091	0.007978	0.436364	0.545455	0.654546
Glen Kyllachy Wind Farm	0.033076	0.002419	0.132304	0.165380	0.198456
Glenmoriston (part of the Moriston Cascade)	0.007915	0.000579	0.031660	0.039575	0.047490
Gordonbush Wind Farm	0.070617	0.005164	0.282468	0.353085	0.423702
Grain	0.012586	0.000920	0.050344	0.062930	0.075516
Grangemouth CHP	0.000000	0.000000	0.000000	0.000000	0.000000
Greater Gabbard Offshore Wind Farm	2.980388	0.217954	11.921552	14.901940	17.882328
Great Yarmouth	0.000000	0.000000	0.000000	0.000000	0.000000
Griffin Wind Farm	0.538395	0.039372	2.153580	2.691975	3.230370
Gunfleet Sands II Offshore Wind Farm	2.200067	0.160889	8.800268	11.000335	13.200402

Power Station	LDTEC Tariff (£/kW/Week)		STTEC Tariff (£/kW)		
	Higher Rate	Lower rate	28 days	35 days	42 days
Gunfleet Sands Offshore Wind Farm	2.200067	0.160889	8.800268	11.000335	13.200402
Gwynt Y Mor Offshore Wind Farm	2.270751	0.166058	9.083004	11.353755	13.624506
Hadyard Hill	0.160161	0.011712	0.640644	0.800805	0.960966
Halsary Wind Farm	0.007915	0.000579	0.031660	0.039575	0.047490
Harestanes	0.136485	0.009981	0.545940	0.682425	0.818910
Harting Rig Wind Farm	0.089501	0.006545	0.358004	0.447505	0.537006
Hartlepool	0.013271	0.000970	0.053084	0.066355	0.079626
Heysham Power Station	0.012586	0.000920	0.050344	0.062930	0.075516
Hinkley Point B	0.006015	0.000440	0.024060	0.030075	0.036090
Hirwaun Power Station	0.005675	0.000415	0.022700	0.028375	0.034050
Holyhead	0.000000	0.000000	0.000000	0.000000	0.000000
Hornsea Power Station 1A	1.844354	0.134876	7.377416	9.221770	11.066124
Hornsea Power Station 1B	1.844354	0.134876	7.377416	9.221770	11.066124
Hornsea Power Station 1C	1.844354	0.134876	7.377416	9.221770	11.066124
Hornsea Power Station 2A	0.000000	0.000000	0.000000	0.000000	0.000000
Hornsea Power Station 2B	0.000000	0.000000	0.000000	0.000000	0.000000
Hornsea Power Station 2C	0.000000	0.000000	0.000000	0.000000	0.000000
Humber Gateway Offshore Wind Farm	2.213725	0.161888	8.854900	11.068625	13.282350
Immingham	0.006015	0.000440	0.024060	0.030075	0.036090
Indian Queens	0.002730	0.000200	0.010920	0.013650	0.016380
Invergarry (part of the Garry Cascade)	0.028044	0.002051	0.112176	0.140220	0.168264
Iron Acton	0.007915	0.000579	0.031660	0.039575	0.047490
J G Pears	0.008471	0.000620	0.033884	0.042355	0.050826
Keadby	0.012586	0.000920	0.050344	0.062930	0.075516
Keadby II	0.012586	0.000920	0.050344	0.062930	0.075516
Kearsley	0.006015	0.000440	0.024060	0.030075	0.036090
Keith Hill Wind Farm	0.089488	0.006544	0.357952	0.447440	0.536928
Kemsley PP	0.006015	0.000440	0.024060	0.030075	0.036090
Kennoxhead Wind Farm Extension	0.134305	0.009822	0.537220	0.671525	0.805830
Kilbraur Wind Farm	0.049142	0.003594	0.196568	0.245710	0.294852
Kilgallioch	0.061847	0.004523	0.247388	0.309235	0.371082
Killingholme	0.012586	0.000920	0.050344	0.062930	0.075516
Kilmorack (part of the Beaully Cascade)	0.018778	0.001373	0.075112	0.093890	0.112668
Kings Lynn A	0.000000	0.000000	0.000000	0.000000	0.000000
Kirkby (Tertiary)	0.008471	0.000620	0.033884	0.042355	0.050826
Kype Muir	0.089501	0.006545	0.358004	0.447505	0.537006
Laleham	0.008471	0.000620	0.033884	0.042355	0.050826
Landulph	0.006015	0.000440	0.024060	0.030075	0.036090
Langage	0.041409	0.003028	0.165636	0.207045	0.248454
Lincs Offshore Wind Farm	4.601506	0.336505	18.406024	23.007530	27.609036
Lister Battery (formerly Lister Drive)	0.003958	0.000289	0.015832	0.019790	0.023748
Little Barford	0.006015	0.000440	0.024060	0.030075	0.036090
Lochay (Part of Killin Cascade Hydro Scheme)	0.028044	0.002051	0.112176	0.140220	0.168264
Lochluichart	0.106246	0.007770	0.424984	0.531230	0.637476
London Array Offshore Wind Farm	2.803591	0.205024	11.214364	14.017955	16.821546
Luichart (part of the Conon Cascade)	0.038847	0.002841	0.155388	0.194235	0.233082
Lynemouth Power Station	0.000000	0.000000	0.000000	0.000000	0.000000
Marchwood	0.026575	0.001943	0.106300	0.132875	0.159450
Mark Hill Wind Farm	0.052118	0.003811	0.208472	0.260590	0.312708
Medway Power Station	0.012586	0.000920	0.050344	0.062930	0.075516

Power Station	LDTEC Tariff (£/kW/Week)		STTEC Tariff (£/kW)		
	Higher Rate	Lower rate	28 days	35 days	42 days
Melksham (Tertiary)	0.006015	0.000440	0.024060	0.030075	0.036090
Middle Muir Wind Farm	0.134305	0.009822	0.537220	0.671525	0.805830
Milford Haven	0.000000	0.000000	0.000000	0.000000	0.000000
Millbrook Power	0.000000	0.000000	0.000000	0.000000	0.000000
Millennium South	0.025952	0.001898	0.103808	0.129760	0.155712
Millennium Wind	0.098242	0.007184	0.392968	0.491210	0.589452
Minnygap	0.016679	0.001220	0.066716	0.083395	0.100074
Monets Garden	0.000000	0.000000	0.000000	0.000000	0.000000
Moray East Offshore Wind Farm	0.000000	0.000000	0.000000	0.000000	0.000000
Mossford (part of the Conon Cascade)	0.162857	0.011910	0.651428	0.814285	0.977142
Nant	0.000000	0.000000	0.000000	0.000000	0.000000
Near Na Gaoithe Offshore Wind Farm	0.000000	0.000000	0.000000	0.000000	0.000000
Ormonde Offshore Wind Farm	4.279982	0.312992	17.119928	21.399910	25.679892
Orrin (part of the Conon Cascade)	0.007915	0.000579	0.031660	0.039575	0.047490
Pembroke Power Station	0.012586	0.000920	0.050344	0.062930	0.075516
Pen Y Cymoedd Wind Farm	0.011690	0.000855	0.046760	0.058450	0.070140
Peterborough	0.000000	0.000000	0.000000	0.000000	0.000000
Peterhead	0.008471	0.000620	0.033884	0.042355	0.050826
Pogbie Wind Farm	0.089488	0.006544	0.357952	0.447440	0.536928
Priestgill Wind Farm	0.000000	0.000000	0.000000	0.000000	0.000000
Progress Power Station	0.000000	0.000000	0.000000	0.000000	0.000000
Race Bank Wind Farm	2.034443	0.148777	8.137772	10.172215	12.206658
Rampion Offshore Wind Farm	0.000000	0.000000	0.000000	0.000000	0.000000
Ratcliffe on Soar	0.012586	0.000920	0.050344	0.062930	0.075516
Richborough 1	0.006015	0.000440	0.024060	0.030075	0.036090
Richborough 2	0.006015	0.000440	0.024060	0.030075	0.036090
Robin Rigg East Offshore Wind Farm	1.590889	0.116341	6.363556	7.954445	9.545334
Robin Rigg West Offshore Wind Farm	2.408614	0.176140	9.634456	12.043070	14.451684
Rocksavage	0.003701	0.000271	0.014804	0.018505	0.022206
Rye House	0.006015	0.000440	0.024060	0.030075	0.036090
Saltend	0.009405	0.000688	0.037620	0.047025	0.056430
Sandy Knowe Wind Farm	0.283256	0.020714	1.133024	1.416280	1.699536
Sanquhar Wind Farm	0.266689	0.019503	1.066756	1.333445	1.600134
Seabank	0.006015	0.000440	0.024060	0.030075	0.036090
Sellafield	0.000000	0.000000	0.000000	0.000000	0.000000
Severn Power	0.008471	0.000620	0.033884	0.042355	0.050826
Sheringham Shoal Offshore Wind Farm	3.059106	0.223710	12.236424	15.295530	18.354636
Shoreham	0.000000	0.000000	0.000000	0.000000	0.000000
Sizewell B	0.006015	0.000440	0.024060	0.030075	0.036090
Sloy G2 and G3	0.007915	0.000579	0.031660	0.039575	0.047490
South Humber Bank	0.002590	0.000189	0.010360	0.012950	0.015540
South Kyle	0.016679	0.001220	0.066716	0.083395	0.100074
Spalding	0.020451	0.001496	0.081804	0.102255	0.122706
Spalding Energy Expansion	0.020451	0.001496	0.081804	0.102255	0.122706
Staythorpe C	0.012586	0.000920	0.050344	0.062930	0.075516
Strathy North Wind	0.114478	0.008372	0.457912	0.572390	0.686868
Stronelairg	0.066413	0.004857	0.265652	0.332065	0.398478
Sutton Bridge	0.012586	0.000920	0.050344	0.062930	0.075516
Taylors Lane	0.000000	0.000000	0.000000	0.000000	0.000000
Tees Renewable Energy Plant	0.008471	0.000620	0.033884	0.042355	0.050826
Thanet Offshore Wind Farm	3.094320	0.226285	12.377280	15.471600	18.565920

Power Station	LDTEC Tariff (£/kW/Week)		STTEC Tariff (£/kW)		
	Higher Rate	Lower rate	28 days	35 days	42 days
Toddleburn Wind Farm	0.089488	0.006544	0.357952	0.447440	0.536928
Torness	0.006015	0.000440	0.024060	0.030075	0.036090
Tottenham	0.003958	0.000289	0.015832	0.019790	0.023748
Tralorg Wind Farm	0.052118	0.003811	0.208472	0.260590	0.312708
Triton Knoll Offshore Wind Farm	0.000000	0.000000	0.000000	0.000000	0.000000
Upware Solar Farm	0.006015	0.000440	0.024060	0.030075	0.036090
Uskmouth	0.008471	0.000620	0.033884	0.042355	0.050826
Walney 3 Offshore Wind Farm	1.682130	0.123013	6.728520	8.410650	10.092780
Walney 4 Offshore Wind Farm	1.682130	0.123013	6.728520	8.410650	10.092780
Walney II Offshore Wind Farm	3.619198	0.264669	14.476792	18.095990	21.715188
Walney I Offshore Wind Farm	3.844189	0.281123	15.376756	19.220945	23.065134
Walpole	0.012586	0.000920	0.050344	0.062930	0.075516
Warley (tertiary)	0.008471	0.000620	0.033884	0.042355	0.050826
Waterbeach Solar Farm	0.006015	0.000440	0.024060	0.030075	0.036090
Weirs Drove	0.006015	0.000440	0.024060	0.030075	0.036090
West Burton A	0.012586	0.000920	0.050344	0.062930	0.075516
West Burton B	0.012586	0.000920	0.050344	0.062930	0.075516
Westermost Rough Offshore Wind Farm	2.718136	0.198775	10.872544	13.590680	16.308816
West of Duddon Sands Offshore Wind Farm	2.961097	0.216543	11.844388	14.805485	17.766582
Whitelee	0.009795	0.000716	0.039180	0.048975	0.058770
Whitelee Extension	0.020186	0.001476	0.080744	0.100930	0.121116
Whiteside Hill Wind Farm	0.266689	0.019503	1.066756	1.333445	1.600134
Willington	0.006015	0.000440	0.024060	0.030075	0.036090
Wilton	0.008471	0.000620	0.033884	0.042355	0.050826
Windy Rig Wind Farm	0.100201	0.007328	0.400804	0.501005	0.601206
Windy Standard II (Brockloch Rig) Wind Farm	0.093712	0.006853	0.374848	0.468560	0.562272
Worset PV & BESS Park	0.000000	0.000000	0.000000	0.000000	0.000000
Wymondley	0.006015	0.000440	0.024060	0.030075	0.036090

The above tariffs apply to levels of STTEC or LDTEC access that is agreed during the charging year.

STTEC can be arranged in 4, 5 or 6 week blocks, with the tariff for the applicable duration applying.

The LDTEC tariff is applied at two rates during the year. The higher LDTEC rate applies to the first 17 weeks of access within a charging year (whether consecutive or not), and the lower LDTEC rate applies to any subsequent access within the year.

Further LDTEC and STTEC tariffs applicable to generation connecting to offshore transmission infrastructure during 2022/23 will be published in future revisions of this statement following the completion of asset transfer.

7. Schedule of Pre-Asset Transfer Related Embedded Transmission Use of System Charges in 2022/23

The following table provides the Pre-Asset Transfer Related Embedded Transmission Use of System (ETUoS) tariffs applicable to embedded transmission connected offshore generation from 1 April 2022. The relating charge is used to recover the element of the Offshore Transmission Operator's Revenue that relates to distribution charges paid in the development of the offshore transmission network¹.

Table 1.15 Pre-Asset Transfer ETUoS Tariff (£/kW)

Offshore Generator	ETUoS
Barrow	1.206045
Gunfleet	3.448466
Ormonde	0.421059
Robin Rigg	11.282931
Robin Rigg West	11.282931
Sheringham Shoal	0.677028
Thanet	0.910803

Please note that in addition to the charges listed above, any enduring distribution charges made to NGESO will be passed through to the relating generator in the form of an ETUoS charge².

Further Pre-Asset Transfer Related ETUoS tariffs applicable to generation connecting to offshore transmission infrastructure during 2022/23 will be published in future revisions of this statement following the completion of asset transfer.

¹ Please note that this is defined in CUSC section 14 as ETUoS_{OFFTO}

² Please note that this is defined in CUSC section 14 as ETUoS_{DNO}

8. Schedule of Transmission Network Use of System Half hourly (HH) Demand Tariffs (£/kW) and Non half Hourly (NHH) Demand Tariffs (p/kWh) for 2022/23

The following table provides the Zonal Demand tariffs for Half Hour metered demand and Energy Consumption TNUoS tariffs for non-Half-Hour demand applicable from 1 April 2022.

Table 1.16 Zonal Demand and Energy Consumption TNUoS Tariffs

Zone	Zone Name	HH Demand Tariff (£/kW)	NHH Demand Tariff (p/kWh)	Embedded Export Tariff (£/kW)
1	Northern Scotland	27.446662	3.558626	-
2	Southern Scotland	35.465718	4.395158	-
3	Northern	44.681931	5.280945	-
4	North West	51.407508	6.382111	-
5	Yorkshire	51.839430	6.199445	-
6	N Wales & Mersey	53.406721	6.460609	-
7	East Midlands	55.528462	6.954272	1.011210
8	Midlands	57.193871	7.145603	2.676619
9	Eastern	57.953489	7.696135	3.436237
10	South Wales	58.461967	6.630234	3.944715
11	South East	60.199079	8.057826	5.681827
12	London	63.687789	6.457749	9.170537
13	Southern	62.263662	7.854326	7.746409
14	South Western	63.747665	8.671244	9.230413

Residual charge for demand:	56.861767
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A demand User's zone will be determined by the GSP Group to which the User is deemed to be connected.

The Demand Tariff is applied to the demand User's average half-hourly metered demand over the three Triad periods, as described in the Statement of Use of Charging Methodology.

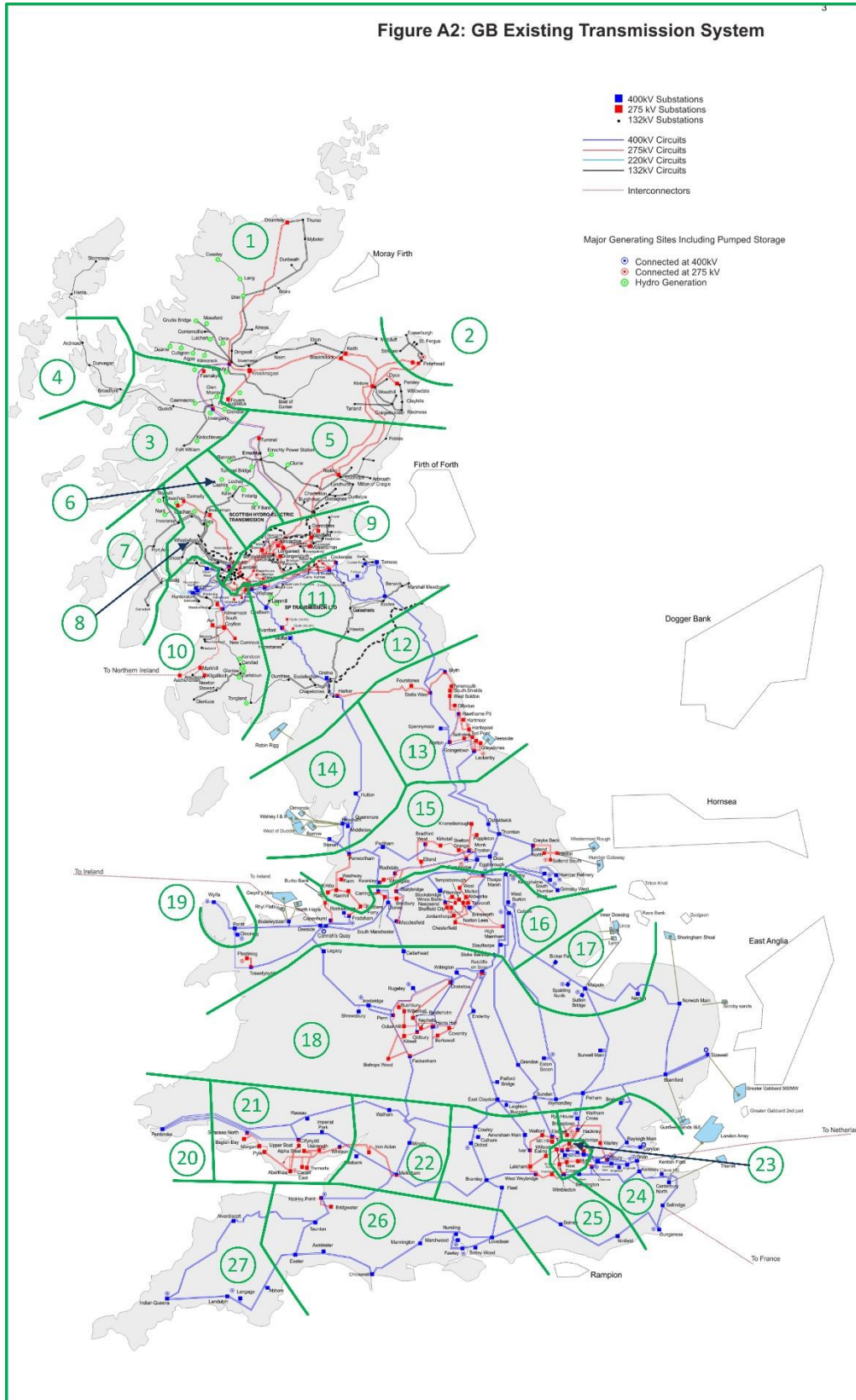
Demand Tariffs are a combination of a locational element that reflects the cost of providing incremental capacity to demand on an area of the main integrated onshore transmission system, and a non-locational residual element which ensures that the appropriate amount of transmission revenue is recovered from demand Users. For 2022/23 the HH demand residual element to two decimal places is £56.86/kW.

In the case of parties liable for both generation and demand charges, the demand tariff zone applicable in respect of that party's demand will be that in which the Transmission Licensee's substation to which the party is connected is geographically located. For example, if a power station were connected at a Transmission Licensee's substation that is geographically located within demand zone 1, it would pay the zone 1 demand tariff.

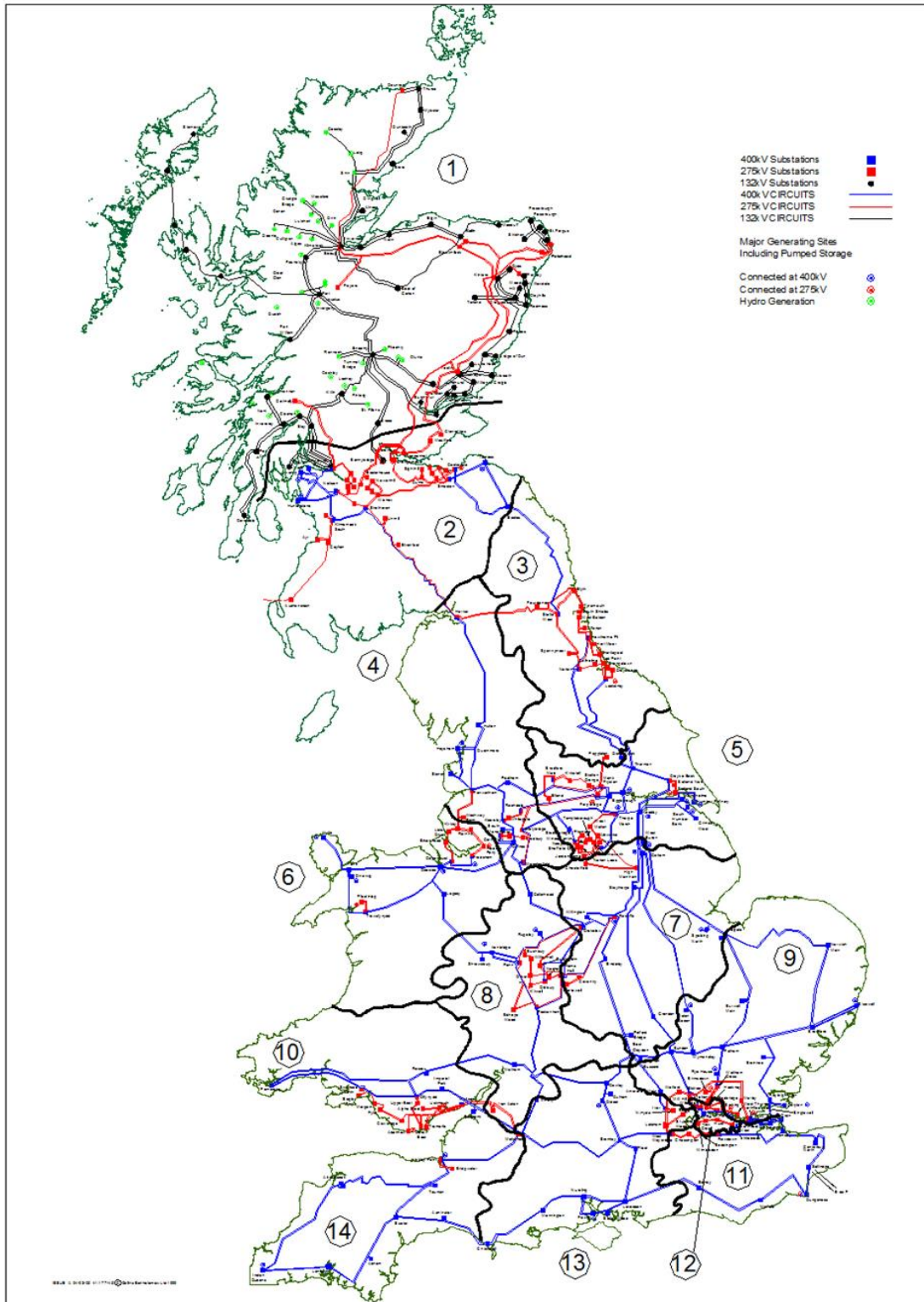
The NHH demand tariff is based on the annual energy consumption during the period 16:00 hrs to 19:00 hrs (i.e. settlement periods 33 to 38 inclusive) over the relevant charging year.

9. Zonal Maps Applicable for 2022/23

Generation Use of System Tariff Zones (Geographical map as at 1 April 2022)



Demand Use of System Tariff Zones (Geographical map as at 1 April 2022)





Schedule 2

Application Fees

10. Application Fees for Connection and Use of System Agreements

Application fees are payable in respect of applications for new connection agreements, certain use of system agreements and for modifications to existing agreements. The fees are based on reasonable costs incurred by National Grid Electricity System Operator including where appropriate, charges from the Transmission Owners (TO's) in accordance with their charging statements. The application process and options available are detailed in the Statement of the Use of System Charging Methodology which is included in Section 14 of the Connection and Use of System Code (CUSC).

The application fee is dependent upon size, type and location of the applicant's scheme.

Users can opt for a variable price application and pay an advance of the Engineering Charges based on the fixed prices shown, which will be reconciled once the actual costs have been calculated using the charge out rates contained in Schedule 4.

Alternatively, onshore Users can opt to pay a fixed price application fee in respect of New and Modified Bilateral Agreements. In some circumstances, where a given application is expected to involve significant costs over and above those normally expected (e.g. substantial system studies, special surveys, investigations, or where a Transmission Owner varies the application fee charged to NGENSO from the standard fee published in their charging statements) to process an offer of terms, NGENSO reserves the right to remove the option for a fixed price application fee.

There are six zones based on the Boundary of Influence map defined in Schedule 4 of the STC (SO-TO Code). Zone NGET1 maps to where NGET is host and there are no affected TOs, NGET2 maps to where NGET is the host TO and SPT is an affected TO, SPT1 is where SPT is the host TO and NGET is an affected TO, SPT2 maps to where SPT is the host TO and there are no affected TOs, SPT3 maps to where SPT is host TO and SHET is an affected TO and SHET1 is where SHET is the host TO and there are no affected TOs.

The application fees indicated will be reviewed on an annual basis and reflect any changes to the Boundaries of Influence. It should be noted that the zone to which a particular user is applying is determined by the location of the connection to the National Electricity Transmission System and not by the geographical location of the User's plant and equipment.

All application fees are subject to VAT.

11. Reconciliation and Refunding of Application Fees for Connection and Use of System Agreements

Application Fees will be reconciled and / or refunded in accordance with Section 14 of the Connection and Use of System Code (CUSC).

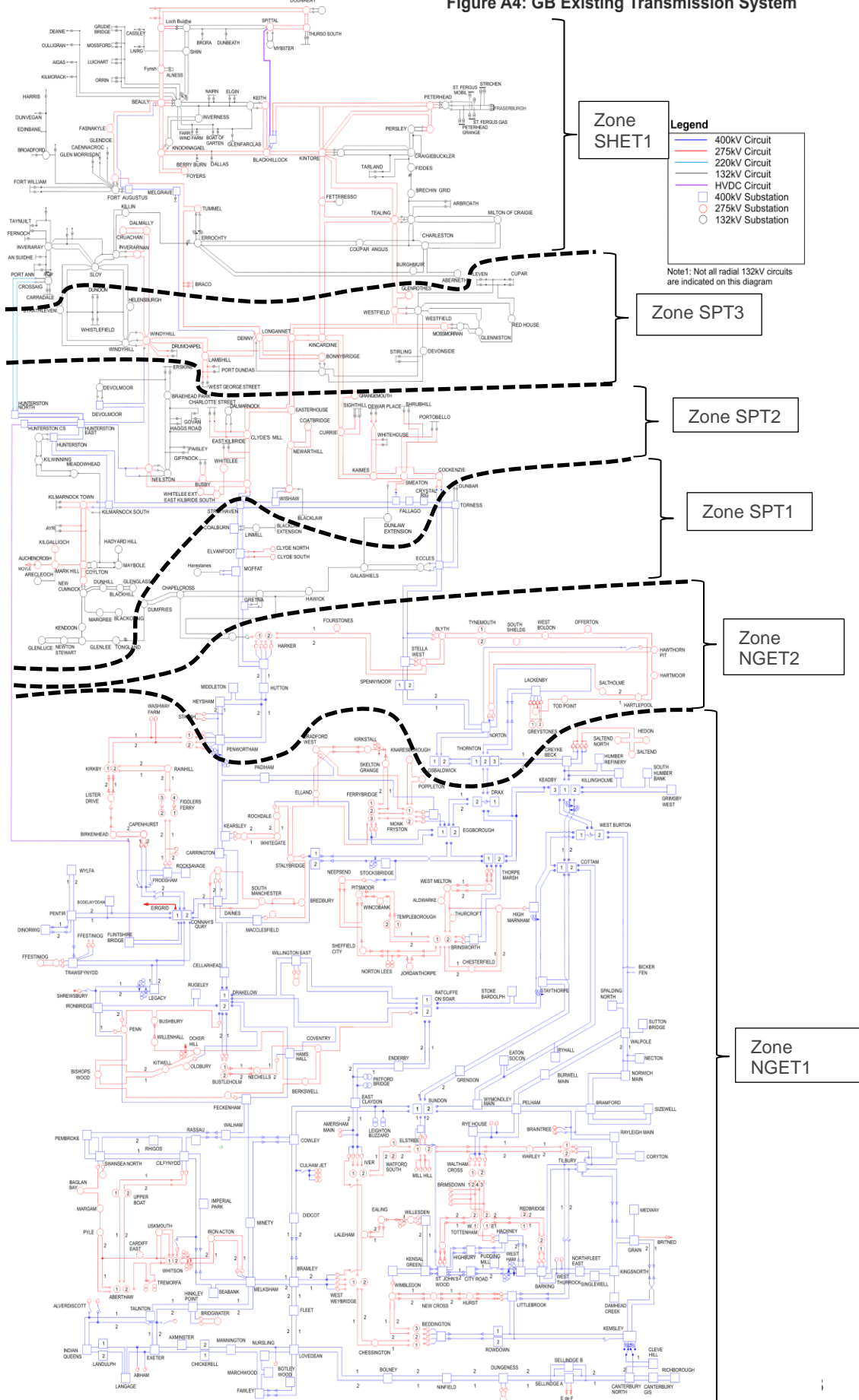
Application Fees Zonal Map

Figure A4: GB Existing Transmission System

SHE TRANSMISSION

SP TRANSMISSION

NATIONAL GRID



Zone SHT1

Legend

- 400kV Circuit
- 275kV Circuit
- 220kV Circuit
- 132kV Circuit
- HVDC Circuit
- 400kV Substation
- 275kV Substation
- 132kV Substation

Note1: Not all radial 132kV circuits are indicated on this diagram

Zone SPT3

Zone SPT2

Zone SPT1

Zone NGET2

Zone NGET1

12. Application Fees for New Bilateral Agreements and Modifications to existing Bilateral Agreements

We have worked closely with the onshore TOs to review the application fees. We have simplified the application fees by removing the rate per MW and reducing the number of fee types. We have also included a fee for storage and aligned the MW bandings with the SQSS. All modification applications are 75% of the new application fee.

Table 2.1 Application Fees

Application Type	Capacity	SHET1	SPT3	SPT2	SPT1	NGET2	NGET 1
		SHET Host SPT affected	SPT Host SHET affected	SPT Host	SPT Host NGET affected	NGET Host SPT affected	NGET Host
New Onshore Application (Entry) / TEC change / Storage	<100MW	£28,250	£45,800	£40,800	£51,850	£35,350	£27,150
	100MW-249MW	£28,250	£45,800	£40,800	£58,350	£48,400	£40,250
	250MW-1800MW	£35,400	£45,800	£40,800	£72,050	£82,950	£67,650
	>1800MW	£55,500	£101,800	£91,800	£145,200	£132,350	£111,950
New Onshore Supply Point (Exit) or New Onshore Modification Application to Existing Supply Point (Exit) / Storage	<=100MW	£43,200	£51,550	£36,550	£49,850	£44,800	£32,550
	>100MW	£56,450	£66,850	£51,850	£69,150	£66,100	£40,600
New Offshore Application (Indicative Fee Only)	-	£102,200	£107,300	£55,800	£84,000	£107,050	£71,350
Statement of Works (Exit)	-	£1,650	£1,650	£1,150	£2,450	£3,800	£3,250
Project Progression (Exit)	-	£9,800	£11,150	£8,900	£16,650	£20,800	£18,750
New Onshore Application BEGA/BELLA	-	£18,650	£23,850	£18,850	£22,800	£16,600	£13,000
Mod App Admin Change	-	£7,150	£7,150	£2,150	£2,150	£4,700	£3,200

Application Type	Fraction of New Application Fee
Modification Application (Entry, Offshore and Exit)	0.75

If applying for a combination of changes after making an initial application and this is prior to the completion of works associated to the initial application, such as a change to works or completion date that also includes a TEC Change, the Application Fee will be the higher of the TEC Change Fee or Modification Application Fee.

Table 2.2 Other Application Fees

Application Type	NGET1	NGET2	SPT1	SPT2	SPT3	SHET1
TEC Exchange Request (no system works)	£10,000	£10,000	£10,000	£10,000	£17,000	£17,000
Request for STTEC or LDDTEC	£10,000					
Reactive Only Service Provider	£10,000	£10,000	£35,000	£35,000	£35,000	£25,000
Suppliers and Interconnector Users	£5,000					
Novate a bilateral agreement	£3,000					

Table 2.3 Limited Duration TEC Request Fees

	Duration of LDTEC (t)	£
Basic request fee for duration t (applicable to all requests for LDTEC Offers)	t ≤ 3 months	£10,000
	3 months < t ≤ 6 months	£15,000
	6 months < t ≤ 9 months	£20,000
	t > 9 months	£30,000
Additional fee for rolling assessment (applicable to a request for an LDTEC Indicative Block Offer)	t ≤ 3 months	£1,000
	3 months < t ≤ 6 months	£1,500
	6 months < t ≤ 9 months	£2,000
	t > 9 months	£3,000
Additional fee for combined applications (applicable to a combined request for an LDTEC Block Offer and an LDTEC Indicative Block Offer)	t ≤ 3 months	£5,000
	3 months < t ≤ 6 months	£7,500
	6 months < t ≤ 9 months	£10,000
	t > 9 months	£15,000

Table 2.4 Temporary TEC Exchange Rate Request Fees

Duration of Temporary Exchange period (t)	£
t ≤ 3 months	15,000
3 months < t ≤ 6 months	25,000
6 months < t ≤ 9 months	30,000
t > 9 months	45,000

13. Examples

1. Entry Application Fee for a New Bilateral Agreement onshore, 300MW Generator wishing to connect to the transmission system in Zone NGET1.
Application Fee = £67,650.00
2. Entry Application Fee for a New Bilateral Agreement offshore, 2000MW Generator wishing to connect to the transmission system in Zone SPT1 Two Connection Sites.
Application Fee = $2 * £72,050.00 = £144,100.00$
3. Entry Application Fee for a Modification to an existing Bilateral Agreement Offshore, 2000MW Generator in Zone SPT1 seeking to alter a commissioning date where there are 2 affected transmission interface sites. This would be a Modification.
Application Fee = $2 * (0.75 * £84,000.00) = £126,000.00$
4. Entry Application Fee for a Modification to an existing Bilateral Agreement, 300MW Generator in Zone NGET2 seeking to alter commissioning date. This would be a Modification.
Application Fee = $0.75 * £82,650.00 = £61,987.00$
5. Entry Application Fee for an embedded generator (BEGA/ BELLA), 300MW embedded generator requesting a BEGA in Zone NGET2.
Application Fee = £26,500.00
6. Entry Application Fee for a TEC Increase 400MW generator in Zone SPT3 wishes to increase TEC by 20MW to 420MW.
Application Fee = £45,100.00
7. Entry Application Fee for a change to completion date, 500MW generator in Zone NGET2 wishes to change their completion date by moving it back by 12 months.
Application Fee = $0.75 * £82,650.00 = 61,987.50$
8. Entry Application Fee to decrease TEC
600MW generator in Zone SHET1 wishes to decrease TEC by 100MW to 500MW.
Application Fee = £35,100.00

Table 2.5 Bilateral Agreement Types

Bilateral Agreement Type	Description
Bilateral Connection Agreement	In respect of Connection Sites of Users.
Bilateral Embedded Licence Exemptible Large Power Station Agreement (BELLA)	For generators that own or are responsible for embedded exemptible large power stations (another party may be responsible for the output under the CUSC and BSC).
Bilateral Embedded Generation Agreement (BEGA)	For generators and BSC parties with embedded power stations, excluding those which are exempt (unless they otherwise choose to be), who are responsible for the output onto a Distribution System.
Construction Agreement	In respect of parties that are applying for new or modified agreements up until the time of commissioning.

The definitions provided below have been extracted from the Grid Code and are provided for ease of reference within this document.



Schedule 3

Charge-Out Rates

14. Charge-Out Rates for Engineering Charges for Variable Price Applications

Appropriately qualified staff will be appointed to process applications and feasibility studies and carry out work in relation to the development of the National Electricity Transmission System. Travel, subsistence and computing costs will also be charged on an actual basis. It should be noted that these rates only apply to work carried out by the Transmission Licensee's in relation to licensed transmission activities. Different rates may apply when asked to quote for other work.

Table 3.1 Charge-Out Rates

	£/day			
	NGESO	NGET	SPT	SHET
Senior Management; Legal	£1,016.00	£ 884.00	£ 993.00	£1,092.00
Departmental Management	£ 837.00	£ 812.00	£ 844.00	£ 731.00
Senior members of staff (Engineering; Commercial)	£ 696.00	£ 752.00	£ 723.00	£ 645.00
Standard (Engineering; Commercial)	£ 551.00	£ 625.00	£ 593.00	£ 504.00
Support staff; junior staff	£ 367.00	£ 526.00	£ 363.00	£ 371.00



Schedule 4

Connection Charges

15. Non-Capital Components applicable for Maintenance and Transmission Running Costs in Connection Charges for 2022/23

The following sections set out the components of connection charges and the parameters used to set the charges.

Connection charges are made up of capital and non-capital components. The non-capital component of the connection charge is divided into two parts, as set out below.

Part A: Site Specific Maintenance Charges

Site-specific maintenance charges are calculated each year based on the forecast total site-specific maintenance for GB divided by the total Gross Asset Value (GAV) of the transmission licensees' GB connection assets, to arrive at a percentage of total GAV. For 2022/23 this will be 0.38%.

Part B: Transmission Running Costs

The Transmission Running Cost (TRC) factor is calculated at the beginning of each price control to reflect the proportion of the Transmission Running Costs (e.g. rates, operation, indirect overheads) incurred by the transmission licensees that should be attributed to connection assets.

The TRC factor is calculated by taking a proportion of the forecast Transmission Running Costs for the transmission licensees (based on operational expenditure figures from the latest price control) that corresponds with the proportion of the transmission licensees' total connection assets as a function of their total business GAV. This cost factor is therefore expressed as a percentage of an asset's GAV and will be fixed for the entirety of the price control period. For 2021/22 to 2025/26 this will be 1.06%.

To illustrate the calculation, the following example uses the average operating expenditure from the published price control and the connection assets of each transmission licensee expressed as a percentage of their total system GAV to arrive at a GB TRC of 1.06%:

Connection assets as a percentage of total system GAV for each TO:

SP Transmission plc	12.9%
Scottish Hydro Electricity Transmission plc	8.49%
National Grid Electricity Transmission plc	12.23%

Published current price control average annual operating expenditure (£m):

SP Transmission plc	79.56
Scottish Hydro Electric Transmission plc	108.21
National Grid Electricity Transmission plc	430.14

Total GB Connection GAV = £5.04bn

Gross GB TRC Factor =

$$(12.23\% \times £430.14\text{m} + 8.49\% \times £79.56\text{m} + 12.9\% \times £108.21\text{m}) / £5.04\text{bn} = 1.43\%$$

$$\begin{aligned} \text{Net GB TRC Factor} &= \text{Gross GB TRC Factor} - \text{Site Specific Maintenance Factor}^* \\ &= 1.43\% - 0.37\% = 1.06\% \end{aligned}$$

* Note – the Site-Specific Maintenance Factor used to calculate the TRC Factor is that which applies for the first year of the price control period.

16. Transmission Owner Rate of Return

Rate of return (RoR) is aligned to the pre-tax cost of capital in the price control of the Relevant Transmission Licensee. For 2022/23 this will be as per the table below.

Table 4.1 Rate of Return

Transmission Owner	Revaluation Type	Rate of Return
National Grid Electricity Transmission plc	RPI	3.41%
National Grid Electricity Transmission plc	MEA	4.91%
SP Transmission plc	RPI	3.28%
Scottish Hydro Electric Transmission plc	RPI	2.79%

17. Illustrative Connection Asset Charges

An indication of First Year Connection Asset Charges for new connection assets using estimates of Gross Asset Values and examples of connection charges are outlined in Appendix A.



A

Appendix A: Examples of Connection Charge Calculations

The following examples of connection charge calculations are intended as general illustrations.

Example 1

This example illustrates the method of calculating the first-year connection charge for a given asset value. This method of calculation is applicable to indicative price agreements for new connections, utilising the TOPI method of charging, and assuming:

- i) the asset is commissioned on 1 April 2022
- ii) there is no inflation from year to year i.e. GAV remains constant
- iii) the site-specific maintenance charge component remains constant throughout the 40 years at 0.38% of GAV
- iv) the Transmission Running Cost component remains constant throughout the 40 years at 1.06% of GAV
- v) the asset is depreciated over 40 years
- vi) the rate of return is TO specific and aligned to the pre-tax cost of capital in the price control period for 2021-2025 for the 40-year asset life.
- vii) the asset is terminated at the end of its 40-year life

For the purpose of this example, the asset on which charges are based has a Gross Asset Value of £3,000,000 as of the 1st April 2022.

Charge	Calculation	
Site Specific Maintenance Charge (0.38% of GAV)	3,000,000 x 0.38%	£11,400
Transmission Running Cost (1.06% of GAV)	3,000,000 x 1.06%	£31,800
Capital charge (40-year depreciation 2.5% of GAV)	3,000,000 x 2.5%	£75,000
Return on mid-year NAV (3.41% of NAV)	2,962,500 x 3.41%	£101,021
TOTAL		£219,221

The first-year charge of £219,221 would reduce in subsequent years as the NAV of the asset is reduced on a straight-line basis, assuming a zero rate of inflation.

This illustration reflects the annual connection charge over time (assuming no inflation):

Year	Charge
1	£219,221
2	£216,663
10	£196,203
40	£119,478

Example 2

The previous example assumes that the asset is commissioned on 1 April 2022. If it is assumed that the asset is commissioned on 1 July 2022, the first year charge would equal 9/12th of the first year annual connection charge i.e. £164,415.94

This gives the following annual charges over time:

Year	Charge
1	£164,415.94 connection charge for period July 2022 to March 2023)
2	£216,663
10	£196,203
40	£119,478

Example 3

In the case of a firm price agreement, there will be two elements in the connection charge, a finance component and a running cost component. These encompass the four elements set out in the examples above. Using exactly the same assumptions as those in example 1 above, the total annual connection charges will be the same as those presented. These charges will not change as a result of the adoption of a different charging methodology by National Grid Electricity System Operator, providing that the connection boundary does not change.

Example 4

If a User has chosen a 20-year depreciation period for their Post Vesting connection assets and subsequently remains connected at the site beyond the twentieth year their charges are calculated as follows.

For years 1-20 the charge is as calculated above, except the capital charge will be 5% of GAV

For years 21-40 the NAV will be zero and the asset will be fully depreciated so there will be no rate of return or depreciation element to the charge. They will pay a connection charge based on the following formula:

$$\text{Annual Connection Charge}_n = \text{SSF}_n (\text{TOPIGAV}_n) + \text{TC}_n (\text{GAV}_n)$$

One off Charges

To provide or modify a connection, the Transmission Owner may need to carry out works on the transmission system which, although directly attributable to the connection, may not give rise to additional Connection Assets.

Where connection requirements lead to additional capital assets over those normally required, the capital value is paid for as a One-Off Charge. These capital assets require maintenance on a regular basis as is the case with connection assets. This is called “One-Off Assets - Site Specific Annual Maintenance” (OAMF) and “One-Off Assets Running Cost” (OARC). This OAMF and OARC is applicable to NGET Connections Only.

OAMF is a percentage factor applied to the reindexed One-Off capital asset values to recover a reasonable proportion of NGET’s maintenance costs on an annual basis. The current OAMF factor is **0.36%**.

OARC is a percentage factor applied to the reindexed One-Off capital asset values to recover a reasonable proportion of NGET’s business running costs. The current OARC factor is **0.92%**. This is calculated at the beginning of each price control.

One-Off Asset maintenance charges will be applied annually on a 1/12th monthly basis and applied pro-rata for the first month and first partial year following commissioning. Other payment terms can be agreed.

Example

One-off charge of £100,000 for assets attributable to the connection.

Charge	Calculation	
One-Off Assets - Site Specific Annual Maintenance (0.36% of One-off charge)	£100,000 x 0.36%	£360
One-Off Assets Running Cost (0.96% of One-off charge)	£100,000 x 0.96%	£920
Annual Charge		£1,280

Index to the Statement of Use of System Charges Revisions

Issue	Description	Modifications
10.1	2014/15 Publication	-
11.0	2015/16 Publication	-
12.0	2016/17 Publication	CMP213 Transmit Application fee tables
13.0	2017/18 Publication	-
14.0	2018/19 Publication	Change introduced by CMP264/265 to demand TNUoS tariffs.
1.0	2019/20 Publication	Document transferred to NGESO Section on Balancing Services removed following changes to incentive mechanism.
2.0	2020/21 Publication	Updated format for application fees with new zones
3.0	2021/22 Publication	Change introduced by the start of RIIO-2 price control parameter reset and several code modifications: Impacting TNUoS tariffs: CMP317/327, CMP324/325, CMP353, CMP355/356, CMP357 Impacting connection charges: CMP306 Application fee review
3.1	2021/22 Publication	Updated to reflect Affected TO Costs for SHET1
3.2	2021/22 Publication	Hornsea 1 Offshore tariffs added Added novation app fee in "Other Application Fees"
4.0	2022/23 Publication	Updated as part of annual review